ABSTRACT OF THE DISCLOSURE

System and method are described for program analysis with data caching. Briefly described, in architecture, the system can be implemented as follows. The present invention for program analysis with data caching includes a counter for tracking each time one of a plurality of blocks of code in the computer program is executed. A counter cache stores the plurality of counters of the plurality of blocks of code that are most recently executed. A storage area stores a plurality of counters of the plurality of blocks of code that are not most recently executed code. The present invention can also be viewed as providing a method for providing program analysis with data caching. In this regard, the method can be broadly summarized by the following steps executing said computer program; (1) using a counter for tracking each time one of said plurality of blocks of code is executed; (2) maintaining a counter cache for storing said plurality of counters of said plurality of blocks of code that are most recently executed; and (3) maintaining a storage area for storing a plurality of counters of said plurality of blocks of code that are not most recently executed.